

REMARKS

Claims 16-20, 22-49 were pending prior to this Response. By the present communication, new claim 50 has been added, claims 16 and 36 have been cancelled without prejudice, and claims 17, 20, 22, 23, 42, 45 and 48 have been amended to define Applicant's invention with greater particularity. The amendments add no new matter, being fully supported by the Specification and original claims. The amendments are believed to place the application in condition for allowance. Therefore entry of the amendments is respectfully requested. Upon entry of the amendments, claims 17-20 22-35 and 37-50 will be pending.

The Rejection Under 35 U.S.C. § 103(a)

A. Applicants respectfully traverse the rejection of claims 16-20, 22-33, and 36-45 under 35 U.S.C. § 103(a) over U.S. Patent No. 5,525,490 to Erickson et al. (hereinafter "Erickson") in view of Short et al. (WO 97/04077; hereinafter "Short") and Horikoshi (1995 *Curr. Op. in Biotech.* 6:292-297; hereinafter "Horikoshi"). Applicant respectfully submits that the invention methods for screening for the presence of a molecule that affects the interaction between a first and second molecule, as defined by amended claim 48 and its dependent claims 16-20, 22-33 and 36-45, distinguishes over the combined disclosures of Erickson, Short and Horikoshi, by requiring:

(i) contacting in a cell a first molecule with a second molecule wherein at least one of the first or second molecules is derived from a library made from a mixed population of organisms, wherein association of the first and second molecules in the presence of a third molecule results in the presence of a detectable response by changing expression of a detectable gene or detectable gene product; and

(ii) comparing the detectable response in the presence of the third molecule and the first and second molecules with the detectable response in the absence of the third molecule, wherein a difference in response is indicative of first and second molecules that interact and a third molecule that affects the interaction between the first and second molecules, thereby identifying the presence of a molecule that affects the interaction of the first and second molecules.

Applicant does not agree that the combined disclosures of Erickson, Short and Horikoshi establish *prima facie* obviousness of claims 17-20, 22-35 and 37-50. None of the references cited provides any motivation or suggestion to combine the teachings of the references, and even if they did, the result would not be the claimed invention. Applicant respectfully submits that the present rejection is based upon hindsight reconstruction of Applicant's invention based upon a number of references that do not teach or suggest the combination and come up short of the invention, even when combined.

Claims 17-20, 22-35 and 37-49 originally depended from claim 16 or claim 36. Claims 16 and 36 have now been cancelled without prejudice. Applicant does not agree that the combined disclosures of Erickson, Short and Horikoshi establish *prima facie* obviousness of the invention for reasons of record in this application (See Response to Office Action mailed May 6, 2002 and March 11, 2003). However, to expedite prosecution and reduce the issues, all pending claims have been amended to depend from claim 48, which the Office Action

indicates is allowable. In view of the acknowledged allowability of claim 48, Applicant respectfully submits that all claims dependent on claim 48 are also allowable. Accordingly, reconsideration and withdrawal of the rejection over the combined disclosures of Erickson, Short and Horikoshi for alleged lack of patentability are respectfully requested.

B. Applicants respectfully traverse the rejection of claims 16-20, 22-33, and 36-45 under 35 U.S.C. § 103(a) over U.S. Patent No. 5,525,490 to Erickson et al. (hereinafter "Erickson") in view of Short et al. (1996 *J. Bact.* 178:591-599; hereinafter "Short") and Horikoshi, and further in view of Mendelshon et al. (1991 *Proc. Natl. Acad. Sci.* 88:1943-1947, hereinafter "Mendelshon"). Applicants respectfully submit that the invention methods for screening for the presence of a molecule that affects the interaction between a first and second molecule, as defined by amended claim 48 as recited above, distinguish over the combined disclosures of Erickson, Short, Horikoshi, and Mendelshon.

None of the references cited provides any motivation or suggestion to combine the teachings of the references, and even if they did, the result would not be the claimed invention. Applicant respectfully submits that the present rejection is based upon hindsight reconstruction of Applicant's invention based upon a number of references that do not teach or suggest the combination and come up short of the invention, even when combined.

Thus, Applicant does not agree that the combined disclosures of Erickson, Short, Horikoshi and Mendelshon establish *prima facie* obviousness of the invention for reasons of record in this application (See Response to Office Action mailed May 6, 2002 and March 11, 2003). However, to expedite prosecution and reduce the issues, claims 16 and 36 have been cancelled without prejudice and all pending claims have been amended to depend from claim 48, which the Office Action indicates is allowable. In view of the acknowledged Allowability of claim 48, Applicant respectfully submits that the invention methods defined by all claims dependent on claim 48 are also allowable. Accordingly, reconsideration and withdrawal of the

In the Application of:
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Page 9

PATENT
Attorney Docket No.: DIVER1380-1

rejection over the combined disclosures of Erickson, Short, Horikoshi and Mendelshon for alleged lack of patentability are respectfully requested.

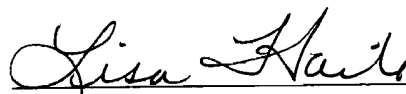
The Objection to the Claims

Applicant respectfully traverses the objection to claims 34, 35, and 46-47 for allegedly dependency on a rejected base claim. By the present communication claims 16 and 36 have been cancelled without prejudice, new claim 50 depends from claim 48, and claims 34, 35, and 46-47 have been amended to depend from claim 48, which the Office Action indicates is allowable. Therefore, Applicant respectfully submits that claims 34, 35 and 46-47, as being dependent upon an allowable base claim, are also allowable. Accordingly, reconsideration and withdrawal of the objection to the claims are respectfully requested.

In view of the amendments and the above remarks, it is submitted that the claims are in condition for allowance and a notice to that effect is respectfully requested. The Examiner is invited to contact Applicants' undersigned representative if there are any questions relating to this application.

Respectfully submitted,

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